

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Preta on 9/10/2009.

Amendment to the specification and Fig. 1 are canceled to remove the new matter of "storage".

Claim 1 (Canceled).

2. (Currently Amended) The method as set forth in claim [[1]] 3, wherein the step of selecting comprises the steps of:

if, among said other possible next hop routers, there is no other next hop router for which the transmission of the datagram on the respective link would result in the bandwidth usage being less than the respective bandwidth threshold, choosing among said other possible next hop routers, another next hop router, updating the bandwidth threshold associated with said other, chosen next hop router with a larger, predefined bandwidth threshold; and

transmitting the datagram to said other, chosen next hop router.

4. (Currently Amended) The method as set forth in claim [[1]] 3, wherein the step of updating the bandwidth usage associated with the first said next hop router, comprises the step of updating in a table, the current bandwidth usage with the estimated bandwidth usage.

8. (Currently Amended) The method as set forth in claim [[1]] 3, wherein a bandwidth usage of a link to said next hop router is based on other datagrams that have been transmitted on said link within a time period prior to a current time.

9. (Currently Amended) A router for routing a datagram in an IP network, said router comprising:

- a system receiving a datagram with a destination network address;

- a system identifying a next hop router en route to or associated with said destination network address; and

- a system determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router, and

- if not, updating the bandwidth usage associated with said next hop router, and transmitting said datagram to said next hop router,

- if so, selecting among other possible next hop routers en route to or associated with said destination address, another next hop router for which transmission of said datagram on a link to said other next hop router would not result in a bandwidth usage exceeding a bandwidth threshold associated with said other next hop router, updating the bandwidth usage associated with said other next hop router, and transmitting said datagram to said other next hop router,

- wherein the router bases a routing decision on the bandwidth usage of the link to said next hop router and on a bandwidth usage as billed by an ISP on the links to the next hop routers,

- wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time, and

wherein the step of determining, comprises the step of adding a bandwidth usage associated with said next hop router immediately before transmission of said datagram on said link to said next hop router to a bandwidth usage required for transmission of said datagram on said link to said next hop router, and comparing a result of said adding step to the bandwidth threshold associated with said next hop router.

Claims 10, 11 and 20-22 (Canceled).

13. (Currently Amended) The method as set forth in claim [[1]] 3, further comprising sending an IP datagram with an updated header to a selected next hop router and defining a current bandwidth for billing as an increasing function.

14. (Currently Amended) The method as set forth in claim [[1]] 3, further comprising, at a beginning of a billing period, defining a current bandwidth threshold equal to a lowest value in a list of bandwidth thresholds.

15. (Currently Amended) The method as set forth in claim [[1]] 3, further comprising, for each link to a next hop router, adding a minimum time to emit a next datagram, a list of bandwidth thresholds, a current bandwidth threshold, and a billing period in the FIB.

16. (Currently Amended) The method as set forth in claim [[1]] 3, further comprising, for each link to a next hop router, utilizing a current bandwidth for billing, a list of bandwidth thresholds, a current bandwidth threshold, and a billing period to route traffic.

Allowable Subject Matter

2. Claims 3, 2, 7, 4, 8, 13, 14, 15, 16, 9, 12, 17, 18, and 19 are allowed, and are renumbered as 1-14.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WANDA Z. RUSSELL whose telephone number is (571)270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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